

10/034,388

Please amend the claims as follows:

1-13. (Cancel)

14. (Currently Amended) A battery comprising (1) at least one positive electrode, (2) at least one negative electrode, (3) an electrolyte, and (4) a homogeneous microporous membrane comprising (a) a hot-melt adhesive, (b) an engineering plastics, (c) optionally a tackifier and (d) optionally a filler.

15. (Currently Amended) The battery of claim 14, wherein the microporous membrane [[further comprising]] comprises a tackifier, in an amount up to about 50% by weight, selected from the group consisting of a hydrocarbon resin and poly(vinylidene fluoride-hexafluoropropene).

16. (Currently Amended) The battery of claim 14, wherein the microporous membrane [[further comprising]] comprises a filler having an average particle size of less than about 50 μ m, in an amount up to about 50% by weight, selected from the group consisting of fumed silica, alumina, titanium dioxide, molecular sieve, calcium carbonate, calcium silicate, glass, ceramic material and polytetrafluoroethylene.

17. (Currently Amended) The battery of claim 14, wherein [[the]] at least one positive electrode is a lithium-ion positive electrode.

18. (Currently Amended) The battery of claim 14, wherein [[the]] at least one negative electrode is a lithium-ion negative electrode,

19. (Original) The battery of claim 14, wherein the electrolyte is a lithium-ion electrolyte.

20. (Original) The battery of claim 19, wherein lithium-ion electrolyte is a liquid lithium-ion electrolyte or a polymer lithium-ion electrolyte.

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21. (New) The battery of claim 14, wherein said microporous membrane is bound onto a surface of said electrodes by heat activation.

22. (New) The battery of claim 14, wherein the hot-melt adhesive is poly(ethylene-vinyl acetate) having a weight content of vinyl acetate from about 25% to about 90%, and from about 10% to about 75% weight of ethylene.

23. (New) The battery of claim 14, wherein the hot-melt adhesive is poly(ethylene-alkyl acrylate) having a weight content of alkyl acrylate from about 10% to about 30% and wherein the alkyl group preferably comprises from one to about five carbon atoms.

24. (New) The battery of claim 14, wherein the engineering plastics is selected from the group consisting of polyimides, polyether imides, polysulfone, polyether sulfones, polyaryl sulfones, polyether ketones, polyether ether ketones, polyphenylene sulfides, polyarylates, polybutylene terephthalate, polystyrene, polystyrene-maleic anhydride, polychlorofluoroethane, polycarbonate, and poly(styrene-methyl methacrylate) or a combination thereof.

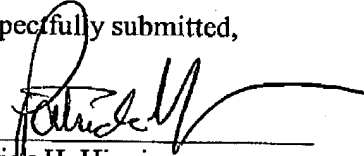
25. (New) A battery comprising (1) at least one positive electrode, (2) at least one negative electrode, (3) an electrolyte, and (4) a microporous membrane comprising (a) a hot-melt adhesive, (b) an engineering plastics, (c) a tackifier and (d) optionally a filler.

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Although no fee is believed to be due at this time, the Commissioner is authorized to charge any deficiency or credit any overpayment in connection herewith to Deposit Account No. 13-2165.

Respectfully submitted,



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